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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, P.C.
1940 DUKE STREET
ALEXANDRIA, VA 22314

EXAMINER	
NGUYEN, KHANH TUAN	
ART UNIT	**PAPER NUMBER**
1796	

NOTIFICATION DATE	DELIVERY MODE
12/18/2008	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patentdocket@oblon.com
oblonpat@oblon.com
jgardner@oblon.com

Office Action Summary	Application No.	Applicant(s)	
	10/537,268	BAUM ET AL.	
	Examiner	Art Unit	
	KHANH T. NGUYEN	1796	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on _____.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *20-24,26,30-37 and 39-44* is/are pending in the application.

4a) Of the above claim(s) *20-24, 26, 30-37 and 39* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *40-44* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Final

Response to Amendment

1. The amendment filed on 11/25/2008 is entered and acknowledged by the Examiner. Claims 40-44 are currently pending in the instant application. Claims 20-24, 26, 30-37 and 39 have been withdrawn from further consideration. Claims 1-19, 25, 27-29, 38, and 45-46 have been canceled.

2. The rejection of claims 45 and 46 under 35 U.S.C. 112, second paragraph, is deemed moot in view of the instant cancellation.

3. The rejection of claims 42-44 under 35 U.S.C. 103(a) as being unpatentable over U.S. Pat. 6,447,696 B1 (Takagi) is maintained for the reasons therein.

The rejection of claims 40 and 41 under 35 U.S.C. 103(a) as being unpatentable over U.S. Pat. 6,447,696 B1 (Takagi) in view of either U.S. Pat. 6,217,621 B1 (Modebelu) or U.S. Pat. 4,227,881 (Fono) is maintained for the reasons therein.

Claim Rejections - 35 USC § 103

4. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

5. Claims 42-44 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Pat. 6,447,696 B1 (Takagi).

With respect to claims 42 and 43, Takagi discloses a grafted polymer comprising a polymerized alkylene oxide component with an ethylene oxide content of at least 50 mol % to obtain a polyether compound (A) having a number-average molecular weight of not lower than 200 (Col 2, lines 29-34). The disclosed polyether compound (A) is considered readable on the claimed polymeric grafting base A which contains no monoethylenically unsaturated units. Takagi further discloses graft-polymerizing a graft component (B) onto the said polyether compound (A) in a ratio such that the graft component (B) is in the range of 0.1.about 1.2 weight parts per 1 weight part of the polyether compound (A), wherein the graft component (B) includes N-vinylpyrrolidone (b1) as an essential component and might further include a monoethylenically unsaturated monomer (b2), wherein the monomer (b2) may includes a cationic monoethylenically unsaturated monomer (b2-2) such as *N-vinylimidazole* (Col. 2, lines 34-44 and Col. 5, lines 16-19). The disclosure of N-vinylpyrrolidone (b1) monomer and N-vinylimidazole (b2-2) monomer are considered readable on the claimed B1 and B2 monomers. Takagi further exemplify at Example 2, the combination of N-vinylpyrrolidone and N-vinylimidazole monomers polymerizing with polyethylene glycol. Takagi teaches the said grafted polymer may be combined with 0.1 wt. % (430 ppm) of a *surfactant* (i.e. dispersant) to form a liquid wash composition (Col. 9, lines 25-35). **Takagi teaches the said grafted polymer is not only useful as scale inhibitors and detergent additives but also additive agents in textile dyeing process (Col. 7,**

lines 53-61). The said additive agent of Takagi comprises of similar components as claimed and is useful in a similar process (i.e. dyeing a textile) as claimed. Thus, the said additive agent of Takagi is considered capable of leveling the dyeing of a textile as recited in claims 42 and 43 because structurally similar composition are generally expected to have similar properties (i.e. leveling ability). In re Gvurik, 596 F. 2d 1012,201 USPQ 552.

With respect to instant claim 44, Takagi discloses a wash liquid composition for inhibiting dye migration wherein the said composition comprises of 10 ppm of the grafted polymer in 500 ml of water matrix, which is the equivalence to 0.002 g/l (Col. 9, lines 29-35 and Col. 11, lines 11-17). Although, Takagi does not explicitly suggest a method wherein the amount of polymeric agent ranges from 0.01 to 10 g/l. Nonetheless it would have been obvious to one having ordinary skill in the art to arrive at the optimal proportions of polymeric agent through routine experimentation for best results (i.e. a range from 0.01 to 10 g/l). As to optimization results, a patent will not be granted based upon the optimization of result effective variables when the optimization is obtained through routine experimentation unless there is a showing of unexpected results which properly rebuts the prima *facie* case of obviousness.

6. Claims 40 and 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Pat. 6,447,696 B1 (Takagi) as applied to the above claims, and further in view of either U.S. Pat. 6,217,621 B1 (Modebelu) or U.S. Pat. 4,227,881 (Fono).

Takagi is relied upon as set forth above. With respect to instant claims 40 and 41, Takagi teaches a liquid wash composition comprising of the claimed grafted polymer and a surfactant (dispersant). Takagi further teaches the said grafted polymer absorbs and dispersed dyes as eluted from fiber into water by washing and inhibit the dyes from migrating to other fibers (Col. 9, lines 8-15). In other words, the eluted dyes are stripped off the fiber and elute into water and are further absorbed/dispersed and inhibited from migrating to other fibers in the presence of the said grafted polymer. The grafted polymers of Takagi not only function as a dye absorbor, a dye dispersant and a dye inhibitor but also a dye stripper.

The difference between the instant claims and Takagi invention is that Takagi does not disclose stripping off dyes at a pH ranging from 9 to 13 and at a temperature above room temperature.

Modebelu discloses a conventional stripping process wherein the textile such as cotton is place in an aqueous bath having a pH from 10.2 to 12.3 at a bath temperature of 90˚F to160˚F, i.e. 32˚C to 71˚C (Col. 1, lines 38-49).

Fono discloses an aqueous stripping liquid having a pH from about 5 to 9 wherein a variety of fabric dyes can be stripped from a variety of fabrics using a temperature of at least about 140˚F.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the grafted polymer of Takagi to strip off dyes on textile as suggested by Takagi at a pH and temperature as suggested by either

Modebelu or Fono because such conditions for stripping of dyes are conventional and known in the art.

Response to Arguments

7. Applicant's arguments filed on 11/25/2008 have been fully considered but they are not persuasive.

In responses to Applicant's remark on pages 8 to 9, Applicant argues that Takagi expressly teaches a method comprising of detergent additive for exhibiting dye migration inhibit effect which is the opposite to the claimed leveling process wherein the migration ability of a dye on textile fibers is supported. The Examiner respectfully disagrees with the Applicant's argument.

Applicant should refer to column 7 lines 53 to 61 of Takagi reference wherein Takagi teaches the detergent additive is used as an additive agents in textile dyeing process (Col. 7, lines 53-61). The Examiner take the position that the additive agent of Takagi comprises of similar components as the claimed graft copolymer that is used in same or substantially similar process (i.e. dyeing a textile) as claimed would be expected for have the same or substantially similar effect such as claimed. In other words, when the additive agent of Takagi is used in the same or similar environment, e.g. aqueous liquor for dyeing a textile, is expected to have a similar effect on the fiber as the claimed graft copolymer because the additive agent of Takagi is structurally similar to the claimed graft copolymer and the court has held that structurally similar compounds are generally expected to have similar properties (i.e. the migration ability of

a dye on textile fibers). In re Gvurik, 596 F. 2d 1012,201 USPQ 552. Further, a closely related homologues, analogs and isomers in chemistry may create a prima facie case of obviousness. In re *Dillon* USPQ 2d 1 897,1904 (Fed. Cir. 1990); In *re Payne* 203 USPQ 245 (CCPA 1979); *In re Mills 126* USPQ 5 13 (CCPA 1960); In re *Henze* 85 USPQ 261 (CCPA 1950); *In* re *Hass* 60 USPQ 544 (CCPA 1944). Thus, the said additive agent of Takagi is considered capable of leveling the dyeing of a textile as recited in claims 42 and 43.

In responses to Applicant's remark on page on 9, Applicant argues that the composition of Takagi inhibit dye migration in the textile rather than used to strip-off dye from a textile as suggested in the method of presence claims 40 and 41. The Examiner respectfully disagrees with the Applicant's argument for the same reasons as set forth above.

Although Takagi does not expressly suggest the used of his additive agent for stripping off-shade dyeing from textile material as recited in claims 40 and 41. However, the composition of Takagi's additive agent comprises of the same or substantially similar components as the claimed graft copolymer and is used in textile dyeing process (Please see Col. 7, lines 53-61). Thus, the Examiner states the same position as above, wherein the additive agent of Takagi is expected to have a similar stripping effect on the fiber as the claimed graft copolymer because the additive agent of Takagi is structurally similar to the claimed graft copolymer and the court has held that structurally similar compounds are generally expected to have similar properties (i.e. stripping ability). In re Gvurik, 596 F. 2d 1012,201 USPQ 552. Further, at column 9

line 8 to line15, Takagi teaches a dyeing process wherein said additive agent can absorb and disperse dye as elute from fiber into the wash by washing and inhibiting the dye from migrating to other fiber as stated in the above rejection. In order for the dye to be in the wash solution as an elute it must have been stripped off from the textile otherwise no dye will be presence in the wash. Therefore, the additive agent of Takagi is not only capable of absorbing and dispersing dye but is also capable of stripping off dyes as suggested by Takagi. Based on this rational, the additive agent of Takagi is considered capable of stripping off the dyeing of a textile as recited in claims 40 and 41.

In responses to Applicant's remark on pages 9 to 10, Applicant appears to be arguing that Modebelu and Fono are irrelevant art and are not compatible with Takagi teaching. The Examiner respectfully disagrees with the Applicant's argument.
Both Modebelu and Fono are relied upon for teaching the general condition of a conventional dye stripping process, specifically the pH ranges and temperature ranges. While the Examiner recognized that neither Modebelu nor Fono suggest a graft copolymer as suggested by Takagi, however Takagi suggest a graft copolymer (i.e. additive agent) that is capable of stripping off dye from textile as explained above. Therefore, a skilled artisan, knowing the general condition of stripping off dye as suggested by Modebelu and Fono, would be try and use the graft copolymer of Takagi in a dye stripping process within the general conditions suggested by Modebelu and Fono because the claimed graft copolymer was known in the prior art and the one skilled in the art could have combined the graft copolymer as claimed by the know methods with no change in their respective functions, and the combination would have

yielded predictable results to one of ordinary skill in the art at the time of the invention. Thus, Modebelu and Fono are considered relevant arts and would be compatible with Takagi teaching because Takagi teaches a additive agent that can be used to strip off dye and while Modebelu and Fono references teach the condition for stripping off dyes.

Based on the above rational, it is believed that the claimed limitations are met by the reference submitted and therefore, the rejections are maintained.

Conclusion

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KHANH T. NGUYEN whose telephone number is (571) 272-8082. The examiner can normally be reached on Monday-Friday 7:00-4:00 EST PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy Gulakowski can be reached on (571) 272-1302. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Lorna M Douyon/
Primary Examiner, Art Unit 1796

/KTN/
12/13/2008